

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1. (Currently Amended) A method to process a document, the method comprising:
employing a processor executing computer-executable instructions stored on a computer-readable storage medium ~~to implement~~ to perform the following acts:
 ~~analyzing features of a document for the presence of specific keywords, the keywords defined in a pre-set vocabulary list;~~
 determining ~~[[the]]~~ a presence of a keyword in ~~[[the]]~~ a document based on features of the document and a pre-set vocabulary list, wherein the keyword in the document ~~[[that]]~~ matches a keyword appearing in the pre-set vocabulary list;
 searching the document for one or more additional keywords related to the matching keyword, to determine a context for the matching keyword;
 generating a set of domain models that represent the document,
 wherein the set of domain models selected to that represent the document ~~[[are]]~~ is a function of the matching keyword and the one or more additional ~~related~~ keywords, and
 wherein the set of domain models comprises properties relevant to the matching keyword;
 populating ~~[[the]]~~ properties of the set of domain models with corresponding data extracted from the document;
 populating the properties of a set of other domain models representing other documents with corresponding data extracted from the other documents;
 storing the set of domain models ~~together~~ with the set of other domain models ~~representing other documents;~~
 structuring the stored domain models so as to be searchable by a querying system;
 retrieving a collection of domain models, from among the stored domain models,
in response to a search performed on the document for further analysis of specific domain

- model properties; and
- applying an algorithm to the ~~respective~~ properties of the retrieved collection of domain models to compute a data value relating to the collection of domain models.
2. (Currently Amended) The method of claim 1, wherein ~~[[a]]~~ the domain model relates to a simple type or a complex type, ~~[[and]]~~ the method further comprising:
- when a property for the domain model is of the simple type, populating the domain model with a value according to the document being represented; and
- when a ~~respective~~ property ~~[[type]]~~ for the domain model is of the complex type, selectively adding another domain model as ~~[[the]]~~ a value for ~~[[that]]~~ the property according to the document being represented.
3. (Previously Presented) The method of claim 1, further comprising:
- searching the set of domain models to determine a subset of features of the document that match search criteria.
4. (Currently Amended) The method of claim 2, comprising:
- analyzing the set of domain models by determining values of properties from at least one domain model, the values extracted from the document represented by the domain model.
5. (Currently Amended) The method of claim 1, further comprising:
- describing the document as instances of the respective domain models of the set.
6. (Currently Amended) The method of claim 1, further comprising:
- setting values in at least one of the domain models that represent supplemental information not in the document but that is associated with the document.
7. (Currently Amended) The method of claim 2, further comprising:
- an automated process where a list of conditions must be met in the document to populate ~~[[a]]~~ the property for the domain model with a value or set of values.

8. (Cancelled)
9. (Currently Amended) A method to facilitate locating a document, the method comprising: employing a processor executing computer-executable instructions stored on a computer-readable storage medium ~~to implement~~ for performing the following acts:
- searching each of a plurality of documents for ~~[[the]]~~ a presence of at least one matching keyword from a list of keywords;
 - representing each document with at least one domain model selected based on the matching keyword, the at least one domain model comprising properties relevant to the keyword;
 - populating the properties of each of the at least one domain model with data extracted from the respective documents;
 - storing the domain models;
 - receiving a query related to locating documents;
 - searching across the stored domain models;
 - identifying a set of the stored domain models that match criteria of the received query; and
 - applying an algorithm to the respective properties of the identified set of the stored domain models to compute a data value relating to the documents represented by the identified set.
10. (Currently Amended) A system that executes document processing, the system comprising:
- a processor;
 - a memory communicatively coupled to the processor, the memory having stored therein computer-executable instructions ~~configured to implement the system, including: that when executed by the processor, cause the processor to perform:~~
- ~~means for~~ modeling a domain with a plurality of domain models;
 - ~~means for~~ determining ~~[[the]]~~ a presence of a keyword in a document that matches a keyword appearing in ~~[[the]]~~ a pre-set vocabulary list;
 - ~~means for~~ searching the document for additional keywords related to the matching

keyword to determine a context for the matching keyword;

~~means for~~ representing the document as a collection of at least one domain model, the domain model selected based at least on the matching keyword and the additional related keywords and having properties relating to the matching keyword;

~~means for~~ populating the properties of the at least one domain model with values corresponding to properties of the document being represented; and

~~means for~~ populating at least one domain model property with a disparate domain model as ~~[[the]]~~ a value of the domain model property.

11. (Currently Amended) A machine-readable storage medium storing a set of instructions that, when executed by a machine, cause the machine to:

model a domain with a plurality of domain models;

determine ~~[[the]]~~ a presence of a keyword in a document that matches a keyword appearing in ~~[[the]]~~ a pre-set vocabulary list;

search the document for additional keywords related to the matching keyword to determine a context for the matching keyword;

select at least one domain model to represent the document based on the matching keyword and the determined context, the at least one domain model comprising properties relating to the matching keyword and the determined context;

populate the properties of the at least one domain model with values corresponding to properties of the document being represented; and

populate at least one domain model property value with a disparate domain model.

12. (Cancelled)

13. (Previously Presented) The method of claim 1, further comprising representing portions of the documents with respective instances of a subset of the generated domain models.

14. (Currently Amended) The method of claim 13, wherein the respective instances are ~~computation-ready~~ computation-ready representations of the portions of the documents that can be understood by at least one computer ~~applications~~ application.

15. (Cancelled)
16. (Currently Amended) The method of claim 1, wherein a hierarchy of domain models [[are]] is generated as a function of respective analyzed features.
17. (Previously Presented) The method of claim 9, further comprising searching across the domain models in connection with locating a collection of documents.
18. (Previously Presented) The method of claim 9, further comprising populating at least one domain model property value with a disparate domain model.
19. (Currently Amended) The method of claim 9, further comprising populating at least one domain model property value with information associated with the document but not found in the document.
20. (Cancelled)
21. (Currently Amended) The system of claim 10, ~~further comprising means for~~ wherein the memory includes stored therein, computer-executable instructions that, when executed by the processor, cause the processor to perform: searching across the plurality of domain models in connection with calculating statistics associated with a set of documents.
22. (Cancelled)